Emergency Streambank Restoration/Stabilization

Kentucky Division of Water Water Quality Certification May 2010 Educational Assistance

Due to the severity of the recent rains and flooding occurrences, the Kentucky Division of Water (KDOW) understands the urgency of public and private landowners to repair waterways and structures that may have experienced damage due to the flooding events of early May 2010.

The KDOW's Water Quality Certification (WQC) Section issues approvals in the form of certifications. The WQC issued approvals certify the federally generated U.S. Army Corps of Engineers (USACE) permits. These permits and certifications allow work within streams and wetlands that involve the placement of any form of fill material (common examples of fill include rip rap, culverts, bridge supports, and utility lines). The WQC Section also provides free technical assistance to improve public comprehension of stream behavior and how modifications may improve or worsen problem areas.

As anticipated with most severe weather cleanup practices, work will need to be conducted in and around stream channels to remove accumulated debris, repair steeply-eroding stream banks, and replace or repair structures such as roadways, bridges, and culverts.

In order to expedite review and permitting procedures between the parties affected by recent flood waters and the WQC Section, the following should be carefully read:

- •Certifications available for flood water cleanup and repair
- Actions exempt from KDOW certifications
- Federal assistance programs

Certifications available for flood water cleanup and repair:

For placement of fill material or dredging within a stream channel or wetland, a USACE permit may be required (contact numbers for the three Corps offices that serve Kentucky are listed at the bottom of this

document). If a USACE permit is required, then a water quality certification is also required.

There are two kinds of USACE permits: general (also called nationwide) and individual. Typically, repair work due to flooding falls under a nationwide or general permit. Each nationwide permit is different and is geared toward the form of the proposed project. The following nationwides are commonly used for projects related to flood cleanup and repair:

NW 13: BANK STABILIZATION:

http://www.water.ky.gov/NR/rdonlyres/B8C44C93-4107-4107-BCB3-91F956D6A031/0/2007NWP13.pdf

NW 3: MAINTENANCE of existing structures:

http://www.water.ky.gov/NR/rdonlyres/4E157BAF-2790-422F-AE4F-7F99DAA21CDE/0/2007NWP03.pdf, and

NW 37: EMERGENCY WATERSHED PROTECTION MEASURES (which has been established for Federal Agencies only): http://www.water.ky.gov/NR/rdonlyres/D5E172B1-FBE2-4C2E-B2EB-616AC6AEF835/0/2007NWP37.pdf

The KDOW has placed limits (or conditions) on each USACE nationwide permit. These conditions determine whether we will allow the work to proceed without the further scrutiny of an individual certification. Typical limits include the amount of linear feet of stream to be impacted, the type of fill material to be placed, and the quality of the stream.

When the Water Quality Certification Section reviews a proposed project, one of three results may be expected.

1.) If the project is proposed to occur within an ephemeral stream (smaller order stream that only flows following a rain event), or if the work proposed within the project is to be conducted above the Ordinary High Water Mark (OHWM) of the stream (usually found in the approximate location of where the vegetation begins and ends on a stream bank), then the project is EXEMPT, and does not require a water quality certification. Please note that a USACE permit may be required even if a certification is not.

2.) If the proposed project:

- a. will occur below the OHWM of an intermittent stream (small to midsize stream that has a groundwater connection, or is at least fed by a natural spring); or
- b. will occur below the OHWM of a perennial stream (mid to large size stream where water is visible within the channel for the majority of the year); or
- c. will occur within less than 1 acre of wetland; and
- d. there is a possibility of fill material being placed within the stream channel or wetland; and
- e. the work is not being done in a Special Use Water (http://eppcapp.ky.gov/spwaters/); and
- f. the proposed project will stay within the limits of the KDOW's General Certification guidelines and conditions associated with flood cleanup and repair procedures,
- g. then the project is permitted under KDOW WQC GENERAL CERTIFICATION.

3.) If the proposed project:

- a. will occur below the OHWM of an intermittent stream or a perennial stream; or
- b. will occur in greater than 1 acre of wetland; and
- c. there is a possibility of fill material being placed within the stream channel or wetland; and/or
- d. the work is being done in a Special Use Water, and
- e. the project proposes to exceed the guidelines and conditions listed within the KDOW WQC General Certifications, then an INDIVIDUAL SECTION 401 WATER QUALITY CERTIFICATION will be required. If the proposed project will require individual certification, please contact the WQC project manager for your area (LINK BELOW). A WQC application (ATTACHMENT 1) will need to be submitted to the Kentucky Division of Water.

NOTE: The USACE, not KDOW, determines if a stream is ephemeral, intermittent, or perennial. They also determine the location of the OHWM. If you are uncertain about these determinations, please contact the USACE. Also, note that the mapping of a stream as "blue line" has no bearing on whether or not a stream is regulated by the USACE or KDOW's water quality certification.

Actions exempt from KDOW certification:

In addition to the exemption criteria listed above, guidelines have been designed to advise in the removal of log jams, creek rock, or other natural material that have formed barriers within the stream, in a document titled "Guidelines for the Removal of Stream Flow Obstructions" (ATTACHMENT 2). This literature addresses use of equipment, placement of removed objects, vegetation removal, timing, and at what elevation you are permitted to conduct work. If your proposed procedures shall exceed the listed guidelines, your project may no longer be exempt from WQC permitting procedures. Please contact a WQC project manager for assistance.

Federal assistance programs

For additional assistance for flood cleanup or removal projects affecting public or private landowners, the Natural Resource Conservation Service (NRCS) of the U.S. Department of Agriculture (USDA) has a multitude of established assistance programs to aid in the funding of the cleanup and repair projects. The Emergency Watershed Protection (EWP) Program is a 75/25 cost-share program established to financially assist in the cleanup of the recent flooding events.

For additional information, please follow:

http://www.ky.nrcs.usda.gov/programs/2010EWP/index.html

Additional KDOW WQC Information:

-Find the WQC Project Manager for your area: http://www.water.ky.gov/permitting/wgcert/Contact+Us.htm

-Investigate the KDOW WQC web page for additional questions: http://www.water.kv.gov/permitting/wgcert/

Additional Contact Information:

-U.S. Army Corps of Engineers Contact Information:

Louisville District: http://www.lrl.usace.army.mil/

(502)-315-6733

Nashville District: http://www.lrn.usace.army.mil/

(615) 369-7500

Huntington District: http://www.lrh.usace.army.mil/

(304)-399-5210

-Links or Contact info for Local Floodplain Coordinators:

http://www.water.ky.gov/NR/rdonlyres/66A3A006-5394-4EB2-B810-DF0C1E6881B3/0/WRFloodplain Coordinators.pdf

ATTACHMENT 1

COMMONWEALTH OF KENTUCKY ENERGY AND ENVIRONMENT CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION DIVISION OF WATER

APPLICATION FOR PERMIT TO CONSTRUCT ACROSS OR ALONG A STREAM AND / OR WATER QUALITY CERTIFICATION

Chapter 151 of the Kentucky Revised Statutes requires approval from the Division of Water prior to any construction or other activity in or along a stream that could in any way obstruct flood flows or adversely impact water quality. If the project involves work in a stream, such as bank stabilization, dredging or relocation, you will also need to obtain a 401 Water Quality Certification (WQC) from the Division of Water. This completed form will be forwarded to the Water Quality Branch for WQC processing. The project may not start until all necessary approvals are received from the KDOW. For questions concerning the WQC process, contact the WQC section at 502/564-3410.

If the project will disturb one or more acres of land, or if the project is part of a larger common plan of development or sale that ultimately will disturb one or more acres, you will also need to complete a Notice of Intent for general permit coverage for storm water discharges associated with construction activities (NOI-SWCA). This general permit will require you to create and implement an erosion control plan for the project. You may find the forms for Kentucky Pollution Discharge Elimination System (KPDES) at the KPDES Web site http://www.water.ky.gov/homepage_repository/kpdes_permit_aps.htm. Return forms to the Floodplain Management Section of the KDOW.

TELEBRONE #-	FMAII ·
	EMAIL:
AGEN1:Give	name of person(s) submitting application, if other than owner.
TELEPHONE #:	EMAIL:
ENGINEER:	P.E. NUMBER:atter if waiver can be granted.
Contact Division of Wa TELEPHONE #:	ater if waiver can be granted. EMAIL:
COUNTY:	NEAREST COMMUNITY:
	NEAREST COMMUNITY: LATITUDE/LONGITUDE:
USGS QUAD NAME	
USGS QUAD NAMESTREAM NAME:	LATITUDE/LONGITUDE: WATERSHED SIZE (in acres):
USGS QUAD NAME STREAM NAME: LINEAR FEET OF STREAM I	LATITUDE/LONGITUDE:

10. 11.	IS ANY PORTION OF THE REQUESTED PROJECT NOW COMPLETE? Yes □ No If yes, identify the completed portion on the drawings you submit and indicate the date activity was completed. DATE: ESTIMATED BEGIN CONSTRUCTION DATE:	
12.	ESTIMATED END CONSTRUCTION DATE:	
13.	HAS AN APPLICATION BEEN SUBMITTED TO THE US ARMY, CORPS of ENGINEERS? Yes □ No	
14.	AN APPLICANT FOR A PERMIT TO CONSTRUCT ACROSS OR ALONG A STREAM <u>MUST</u> ADDRESS PUBLIC NOTICE:	
	(a) PUBLIC NOTICE HAS BEEN GIVEN FOR THIS PROPOSAL BY THE FOLLOWING MEANS: Public notice in newspaper having greatest circulation in area (provide newspaper clipping or affidavit) Adjacent property owner(s) affidavits (Contact Division of Water for requirements.)	
	(b) I REQUEST WAIVER OF PUBLIC NOTICE BECAUSE:	
	Contact Division of Water for requirements.	
	*PUBLIC NOTICE FOR 401 WATER QUALITY CERTIFICATIONS IS GOVERNED BY 401 KAR 9:010	
15.	I HAVE CONTACTED THE FOLLOWING CITY OR COUNTY OFFICIALS CONCERNING THIS PROJECT:	
	Give name and title of person(s) contacted and provide copy of any approval city or county may have issued.	
16.	LIST OF ATTACUMENTS.	
10.	LIST OF ATTACHMENTS: List plans, profiles, or other drawings and data submitted. Attach a copy of a 7.5 minute USGS	
	topographic map clearly showing the project location.	
17.	I, (owner) CERTIFY THAT THE OWNER OWNS OR HAS EASEMENT RIGHTS ON ALL	
	PROPERTY ON WHICH THIS PROJECT WILL BE LOCATED OR ON WHICH RELATED CONSTRUCTION	
18.	WILL OCCUR (for dams, this includes the area that would be impounded during the design flood). REMARKS:	
	I hereby request approval for construction across or along a stream as described in this application and any accompanying documents. To the best of my knowledge, all the information provided is true and correct.	
	SIGNATURE: Owner or Agent sign here. (If signed by Agent, a Power of Attorney should be attached.)	
	DATE:	
	SIGNATURE OF LOCAL FLOODPLAIN COORDINATOR:	
	Permit application will be returned to applicant if not properly endorsed by the local floodplain coordinator.	
	DATE:	
	SUBMIT APPLICATION AND ATTACHMENTS TO:	

Floodplain Management Section Division of Water 200 Fair Oaks Lane Frankfort, KY 40601

Revised 12-09

ATTACHMENT 2

GUIDELINES FOR THE REMOVAL OF STREAM FLOW OBSTRUCTIONS

A stream channel filled with sand, gravel or sediment is a common problem in Kentucky; it is the result of over a century of disturbances within our watersheds. Removal of these materials will not address the causes of sediment and gravel problems within the stream and is not a long-term solution. Investigating and eliminating the cause of sediment and gravel sources will be the most effective way to address sediment and gravel deposition problems. Mechanically removing this material is only a temporary fix. Improper or excessive removal of material from a stream may create stream channel and economic problems for upstream and/or downstream landowners. In-stream activities that significantly increase sedimentation or alter stream flow are violations of state water quality standards and may be subject to enforcement action. Adherence to the following guidelines will exempt you from the Water Quality Certification process:

- Material should be removed using the "one-step removal" process. The one step removal
 process involves lifting material from the stream and placing it outside of the stream
 channel. Material should never be stockpiled within the stream channel. Stockpiling
 material in the floodplain may require a permit from the Water Resources Branch of the
 Kentucky Division of Water. The work area should be smoothed over at the end of each
 work day.
- Backhoes and front-end loaders, which can scoop material out of the channel, are
 preferred for this type of work. Bulldozers, which push the material, will not be allowed
 within the stream as they cause unnecessary disturbance to the stream channel.
- Avoid using vehicles within the stream channel. Removal of materials should be conducted away from the flowing portion of the stream and when possible all work should be done from the bank of the stream.
- The Division of Water strongly advises against the removal of tree vegetation from streambanks whenever it is proposed as an answer to flooding or solid waste management. The removal of trees and their root systems will destabilize the streambanks and result in severe streambank erosion problems with resulting water quality problems.
- Removal of materials should be conducted only during low-flow periods, generally late summer or fall.
- Removal of materials should not be conducted during the fish-spawning season (April 15th to June 15th).
- When excavating gravel bars, only the material more than 12 inches above the normal water elevation should be removed
- Do not push stream gravel up against the sides of the stream in an attempt to stabilize the stream bank or for any other reason. This material is easily eroded and will soon be washed away causing problems for a downstream neighbor. Your local Natural Resources Conservation Service (NRCS) can provide you with effective stream-bank stabilization techniques.